

Title (en)  
Brake disc protected from oxidation

Title (de)  
Oxydationsgeschützte Bremsscheibe

Title (fr)  
Disque de frein protégé de l'oxydation

Publication  
**EP 1275871 B1 20050914 (DE)**

Application  
**EP 02012288 A 20020605**

Priority  
DE 10134059 A 20010713

Abstract (en)  
[origin: EP1275871A2] Brake disk protected from oxidation is made of fiber-reinforced ceramic material. One layer made of a high temperature-resistant lacquer (9) is in a semifluid state at the operating temperature of the brake disk. Independent claims are also included for the use of a high temperature-resistant lacquer for a brake disk, and for a process for producing the above brake disk. Preferred Features: The glass transition temperature of the lacquer lies above about 400 degrees C and the lacquer is temperature resistant up to about 1200 degrees C. The lacquer is based on a magnesium/borosilicate compound. The lacquer additionally contains color pigments which change color above a specific temperature. The friction surfaces (4) and the contact surfaces (10,11) of the brake disk are not covered by the lacquer.

IPC 1-7  
**F16D 65/12; C04B 35/573; C04B 41/00**

IPC 8 full level  
**C04B 41/50** (2006.01); **C04B 41/52** (2006.01); **C04B 41/86** (2006.01); **C04B 41/89** (2006.01); **F16D 65/00** (2006.01); **F16D 65/12** (2006.01);  
**F16D 69/02** (2006.01)

CPC (source: EP US)  
**C04B 41/009** (2013.01 - EP US); **C04B 41/5022** (2013.01 - EP US); **C04B 41/52** (2013.01 - EP US); **C04B 41/86** (2013.01 - EP US);  
**C04B 41/89** (2013.01 - EP US); **F16D 65/0025** (2013.01 - EP US); **F16D 65/123** (2013.01 - EP US); **F16D 65/125** (2013.01 - EP US);  
**F16D 69/02** (2013.01 - EP US); **C04B 2111/00362** (2013.01 - EP US); **F16D 2065/1316** (2013.01 - EP US); **F16D 2065/136** (2013.01 - EP US);  
**F16D 2065/1376** (2013.01 - EP US); **F16D 2065/1392** (2013.01 - EP US); **F16D 2200/0039** (2013.01 - EP US); **F16D 2200/006** (2013.01 - EP US);  
**Y10T 428/249928** (2015.04 - EP US)

C-Set (source: EP US)  
EP  
1. **C04B 41/5022 + C04B 41/4539 + C04B 41/4554 + C04B 41/4572 + C04B 2103/54**  
2. **C04B 41/52 + C04B 41/4535 + C04B 41/5015**  
3. **C04B 41/52 + C04B 41/4539 + C04B 41/5022**  
4. **C04B 35/806 + C04B 41/009**  
US  
1. **C04B 41/5022 + C04B 41/4539 + C04B 41/4554 + C04B 41/4572 + C04B 2103/54**  
2. **C04B 41/52 + C04B 41/4535 + C04B 41/5015**  
3. **C04B 41/52 + C04B 41/4539 + C04B 41/5022**

Cited by  
DE102012021557A1; CN102966689A; DE102012021557B4

Designated contracting state (EPC)  
AT BE CH CY DE DK ES FI FR GB GR IE IT LI LU MC NL PT SE TR

DOCDB simple family (publication)  
**EP 1275871 A2 20030115; EP 1275871 A3 20030212; EP 1275871 B1 20050914;** AT E304668 T1 20050915; DE 10134059 C1 20030403;  
DE 50204227 D1 20051020; ES 2244699 T3 20051216; US 2003021975 A1 20030130; US 6805909 B2 20041019

DOCDB simple family (application)  
**EP 02012288 A 20020605;** AT 02012288 T 20020605; DE 10134059 A 20010713; DE 50204227 T 20020605; ES 02012288 T 20020605;  
US 19512502 A 20020715